

March 4, 2015

Via Fed Ex

Attn: Robert Stein, Chairman
Connecticut Siting Council
10 Franklin Square
New Britain, CT 06051

RE: Petition of Bloom Energy Corporation, as agent for Home Depot, for a Declaratory Ruling for the Location and Construction of a 200 kW Fuel Cell Customer-Side Distributed Resource at 104 Danbury Road, New Milford, CT 06776.

Dear Chairman Stein:

We are submitting an original and fifteen (15) copies of the above-captioned Petition, together with the filing fee of \$625.

In the Petition, Bloom Energy Corporation ("Bloom"), as agent for Home Depot, requests the Connecticut Siting Council approve the location and construction of an approximately 200 kilowatt fuel cell and associated equipment (the "Facility"). The Facility will be located on the site of the Home Depot at 104 Danbury Road, New Milford (the "Site"). Electricity generated by the Facility will be consumed primarily at the Site, and any excess electricity will be exported to the electric grid. The Facility will be fueled by natural gas.

Should you have any questions, concerns, or require additional information, please do not hesitate to contact me at 908-462-9719.

Sincerely,
Core States Group



Richard Procanik
Project Manager

I:\Bloom Energy\BEC-17968 (Home Depot, New Milford, CT)\Project Manager\08 Calcs and Reports\Connecticut Siting Council\2014.03.04_Home Depot (New Milford, CT)_CSC Cover Letter.doc

**STATE OF CONNECTICUT
CONNECTICUT SITING COUNCIL**

PETITION OF BLOOM ENERGY : PETITION NO. ____
CORPORATION AS AGENT FOR HOME :
DEPOT USA, INC. FOR A DECLARATORY :
RULING FOR THE LOCATION AND :
CONSTRUCTION OF A 200-KILOWATT FUEL :
CELL CUSTOMER-SIDE DISTRIBUTED : March 04, 2015
RESOURCE AT 104 DANBURY ROAD, NEW
MILFORD, CONNECTICUT

PETITION OF BLOOM ENERGY CORPORTATION AS AGENT FOR HOME DEPOT USA,
INC. FOR A DECLARATORY RULING

Pursuant to Conn. Gen. Stat. §§ 4-176 and 16-50k(a) and Conn. Agencies Regs. § 16-50j-38 et seq., Bloom Energy Corporation (“Bloom”), as agent for Home Depot USA, Inc. (“Home Depot”), requests that the Connecticut Siting Council (“Council”) approve by declaratory ruling the location and construction of a customer-side distributed resources project comprised of an approximately 200-kilowatt (“kW”) (net) Bloom solid oxide fuel cell Energy Server facility and associated equipment (the “Facility”), located on the site of a Home Depot at 104 Danbury Road, New Milford, Connecticut (the “Site”). See Exhibit 1. The Facility will be installed by Bloom and owned and operated by 2015 Project Company, LLC, a wholly owned subsidiary of Bloom under agreement with Home Depot USA.

Conn. Gen. Stat. § 16-50k(a) provides that:

Notwithstanding the provisions of this chapter or title 16a, the council shall, in the exercise of its jurisdiction over the siting of generating facilities, approve by declaratory ruling . . . (B) the construction or location of any fuel cell, unless the council finds a substantial adverse environmental effect or of any customer-side distributed resources project or facility . . . with a capacity of not more than sixty-five megawatts, as long as such project meets air and water quality standards of the Department of Energy and Environmental Protection.”

As discussed fully in this petition, in addition to being a fuel cell facility, the Facility will be a customer-side distributed resources facility under 65 megawatts (“MW”) that complies with the air and water quality standards of the Connecticut Department of Energy and Environmental Protection (“DEEP”). Additionally, the Facility will not have a substantial adverse environmental effect in the State of Connecticut.

I. COMMUNICATIONS

Correspondence and other communication regarding this petition should be directed to the following parties:

Richard N. Procanik
Core States Group
58 Mount Bethel Road
Suite 301
Warren, NJ 07059
Telephone: (908) 462-9700
Fax: (908) 548-0875
Email: rprocanik@core-eng.com

Amy Shanahan
Bloom Energy Corporation
1299 Orleans Drive
Sunnyvale, CA 94089
Telephone: (408) 543-1746
Fax: (408) 543-1501
Email: Amy.Shanahan@bloomenergy.com

II. DISCUSSION

A. Background

The Facility will be a 200kW customer-side distributed resources facility consisting of one state-of-the-art Bloom Energy Server and associated equipment. The Facility will be interconnected to the existing switchgear located inside the electrical room, near the southeast corner of the Home Depot building (the “Building”). *See* Exhibit 2. Electricity generated by the Facility will be consumed primarily at the Site, and any excess electricity will be exported to the grid.

The Facility will be a “customer-side distributed resources” project because it will be “a unit with a rating of not more than sixty-five megawatts [and is located] on the premises of a retail end user within the transmission and distribution system including, but not limited to, fuel cells” Conn. Gen. Stat. § 16-1(a)(40)(A). Further, in its Final Decision in Docket No. 12-02-09, dated September 12, 2012, the Connecticut Public Utilities Regulatory Authority (“PURA”) determined that Bloom’s Energy Server qualifies as a Class I renewable energy source fuel cell as defined in Conn. Gen. Stat. §16 1(a)(26)(A). *See* Exhibit 3.

B. Description of the Site and the Facility

1. The Site

The Facility will be installed within the Home Depot property located at 104 Danbury Road, New Milford, Connecticut. Specifically, the Facility will be constructed on the 10.3-acre property (“the Site”) that surrounds the Home Depot store. The Site is zoned “General Business Zone 2” (“B2”) under the zoning regulations of the Town of New Milford (the “Town”).

The majority of the surrounding areas to the north, south and east are retail and commercial uses located within zone “B2.” To the west of the site a ballpark located within the “R40 Residential” zone. The nearest structure is a restaurant that lies approximately 55 feet south of the facility. The residential properties on the opposite side of Danbury Road are approximately 575 feet to the northeast of the Facility.

The facility will be located within an asphalt parking area to the north of the building. The portion of the Site that will be used for the Facility is shown in Exhibit 2. Four (4) parking

stalls will be removed by the installation of the facility. The overall parking area for the Building is over parked; therefore, the removal of spaces will not impact customer parking.

Prior to filing this petition, representative from Core States Group, Bloom's engineering consultant, discussed the proposed Facility with the Town's Zoning Enforcement Officer, Laura Regan, on February 5, 2015. To date no comments have been provided from the Town. See Exhibit 4.

2. The Facility

The Facility will consist of one Bloom solid oxide fuel cell Energy Server and associated equipment. The dimensions of the Facility are approximately 32'-8" long, 8'-7" wide and 6'-9" high. The Energy Server module is enclosed, factory-assembled and tested prior to installation on the Site. *See* Exhibit 5.

The Facility will be capable of producing 200 kW of continuous, reliable electric power. The Facility will interconnect to the Site's distribution system and operate in parallel with the grid to provide the Site's electrical requirements. Any electricity generated in excess of the Site's requirement will be exported to the grid under CL&Ps net metering tariff. The interconnection to CL&P will be provided from the existing switchgear located inside the electrical room near the southeast side of the Building. At the time this petition was filled, the CL&P interconnection application for the Facility is being prepared.

The Energy Server will be fueled by natural gas supplied by Yankee Gas Company ("YGC"). Gas service will be delivered to the Energy Server via a new YGC gas meter assembly located adjacent to the existing building meter. A gas shut off valve is being provided

adjacent to the facility. The new service line will branch off of the existing YGC line at the southeast side of the Building.

The Bloom Energy Server will have extensive hardware, software and operator safety control systems, designed into the system in accordance with ANSI/CSA America FC 1-2004, the American National Standards Institute and Canadian Standards Association standard for Stationary Fuel Cell Power Systems. The Facility is remotely monitored by Bloom Energy 24 hours a day, seven days a week. If software or hardware safety circuits detect an unsafe condition, variation in temperature or gas pressure outside of operational parameters, fuel supply is automatically stopped and the system is shut down. Two manual fuel shut-off valves are provided at each installation site, and two normally closed, safety shut-off rated isolation valves are installed within the system. The Facility will be installed in compliance with all applicable building, plumbing, electrical, fire and other codes.

The risk of fire related to the operation of the Energy Server is very low. In the Bloom fuel cell, natural gas is not burned; it is used in a chemical reaction to generate electricity. The natural gas is digested almost immediately upon entering the unit and is no longer combustible. As stated above, any variation in heat outside of the operational parameters will trigger an automatic shutdown of the energy server.

C. The Facility Complies with DEEP's Air and Water Quality Standards and Will Not Have a Substantial Adverse Environmental Effect

The construction and operation of the Facility will comply with DEEP's air and water quality standards and will not have a substantial adverse environmental effect.

Construction-related impacts will be minimal. The Facility will be located within an existing asphalt parking area within the parking area to the north of the Building. The facility will not extend beyond the limits of the existing curbed area. All utilities will be installed within the asphalt drive aisle at the northeast corner of the Building and continue along the east face of the Building to connect with the electrical room near the southeast corner of the Building. All utility trenches will be restored in-kind.

Conn. Agencies Regs. § 22a-174-42, which governs air emissions from new distributed generators, exempts fuel cells from air permitting requirements. Accordingly, no permits, registrations, or applications are required based on the actual emissions from the Facility. *See* Conn. Agencies Regs. §§ 22a-174-42(b) and (e). Notwithstanding this exemption, as shown below in Table 1, the Facility meets the Connecticut emissions standards for a new distributed generator. Further, Bloom's Energy Server has passed the stringent California Air Resources Board Distributed Generation Certification Regulation 2007 Fossil Fuel Emission Standards. *See* Exhibit 6.

Table 1: Connecticut Emissions Standards for a New Distributed Generator

Compound	Connecticut Emission Standard (lbs/MW-hr)¹	Bloom Energy Server (lbs/MW-hr)
Oxides of Nitrogen (NO _x)	0.15	<0.01
Carbon Monoxide (CO)	1	<0.10
Carbon Dioxide (CO ₂)	1,650	773

With respect to water discharges, the Energy Servers are designed to operate without water discharge under normal operating conditions. During construction, appropriate soil erosion prevention techniques will be incorporated around the disturbed areas to minimize soil erosion. Due to the limited disturbance required for the Facility's installation, no construction-related storm water permits will be required. Further, no additional impervious area will be added to the Site and will not affect drainage patterns or stormwater discharge.

The proposed Facility will be located in an existing paved area on a lot that was previously developed and disturbed during construction of the Home Depot store. Therefore, the construction and operation of the Facility will not have any adverse effects on endangered species, historical resources or surrounding areas.

The acoustical impact of the Facility will be minimal, and the Facility will meet the applicable requirements for off-site noise receptors. As discussed above, the proposed Facility will be approximately 55 feet to the north of an existing Restaurant and 575 feet to the south of the nearest residential properties. It has been determined that the Facility satisfies DEEP noise regulations without the need for sound remediation devices.

¹ Conn. Agencies Regs. § 22a-174-42, Table 42-2.

NOTICE

Bloom has provided notice of this petition to all persons and appropriate municipal officials and governmental agencies to whom notice is required to be given pursuant to Conn. Agencies Regs. § 16-50j-40(a).² A copy of the notice letter and a service list is attached as Exhibit 7.

III. BASIS FOR GRANTING OF THE PETITION

Under Conn. Gen. Stat. § 16-50k(a), the Council is required to approve by declaratory ruling the construction or location of a customer-side distributed resources project or facility with a capacity of not more than 65 MW, as long as the facility meets DEEP air and water quality standards. The proposed Facility meets each of these criteria. The Facility is a “customer-side distributed resources” project, as defined in Conn. Gen. Stat. § 16-1(a)(40)(A), because the Facility is “a unit with a rating of not more than sixty-five megawatts [and is located] on the premises of a retail end user within the transmission and distribution system including, but not limited to, fuel cells” and, as demonstrated herein, will meet DEEP air and water quality standards. In addition, as demonstrated above, the construction and operation of the Facility will not have a substantial adverse environmental effect in the State of Connecticut.


² Conn. Agencies Regs. § 16-50j-40(a) requires that “[p]rior to submitting a petition for a declaratory ruling to the Council, the petitioner shall, where applicable, provide notice to each person other than the petitioner appearing of record as an owner of property which abuts the proposed primary or alternative sites of the proposed facility, each person appearing of record as an owner of the property or properties on which the primary or alternative proposed facility is to be located, and the appropriate municipal officials and government agencies [listed in Section 16-50l of the Connecticut General Statutes].”

IV. CONCLUSION

For the reasons stated above, Bloom, as agent for Home Depot, respectfully requests that the Council approve the location and construction of the Facility by declaratory ruling.

Respectfully submitted,

BE 2012 W LLC

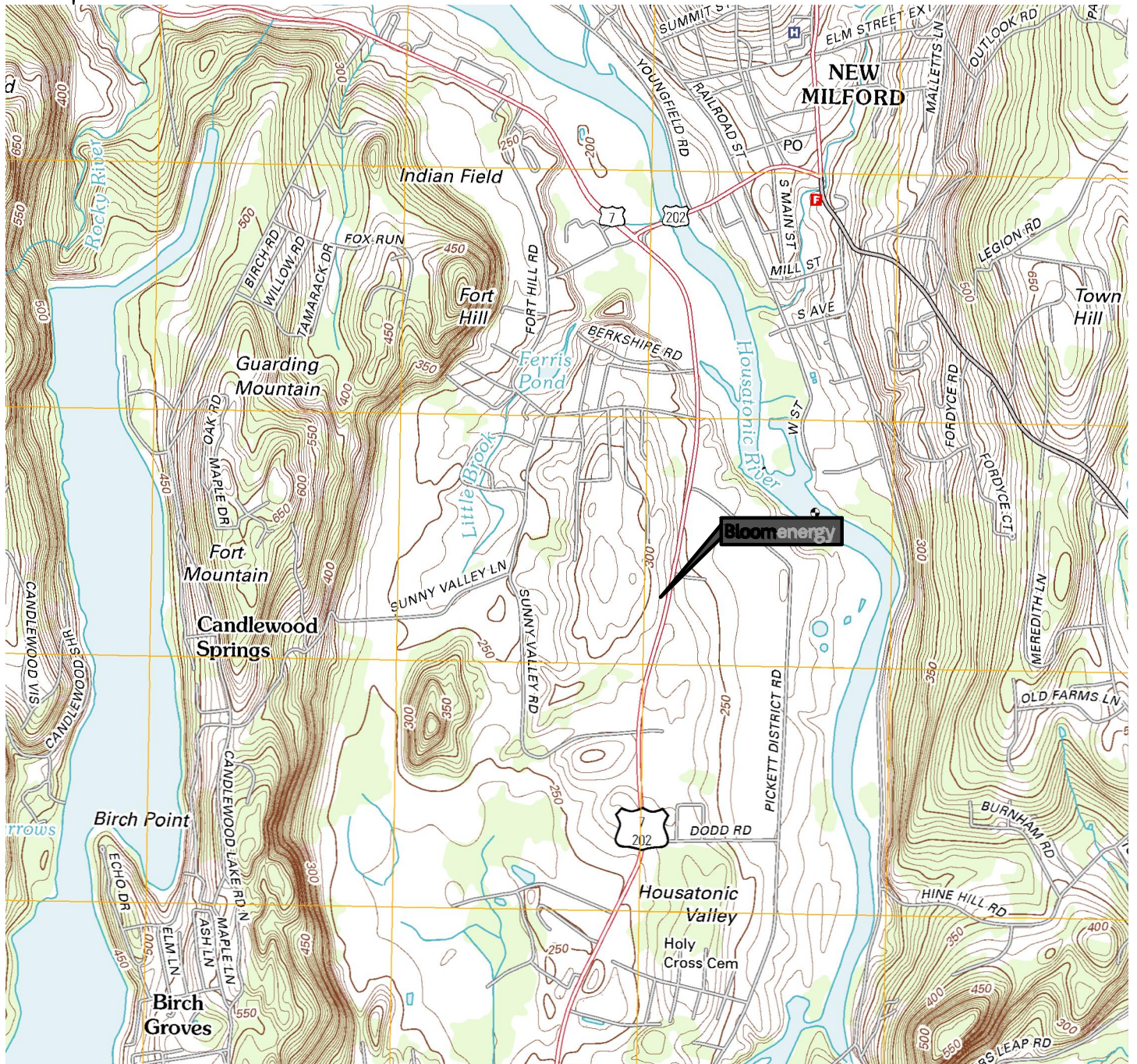
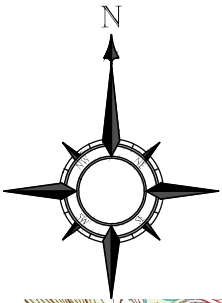
By: _____

Lynne Connors
Bloom Energy Corporation
1299 Orleans Drive
Sunnyvale, CA 94089
Telephone: (617) 633-6915
Email: Lynne.Connors@BloomEnergy.com

EXHIBITS

- Exhibit 1: Site Location Map
- Exhibit 2: Site Plan
- Exhibit 3: Final Decision, PURA Docket No. 12-02-09, *Petition of Bloom Energy Corporation for a Declaratory Ruling that Its Solid Oxide Fuel Cell Energy Server Will Qualify as a Class I Renewable Energy Source* (Sept. 12, 2012)
- Exhibit 4: Correspondence with the Town
- Exhibit 5: Bloom Energy Server Product Datasheet and General Installation Overview
- Exhibit 6: California Air Resources Board Distributed Generation Certification
- Exhibit 7: Notice Pursuant to Conn. Agencies Regs. § 16-50j-40(a)

Exhibit 1



Job#: BEC-17968

Scale: 1" = 2,000'

Date: 01/07/2015

Drawn By: MDS



58 Mount Bethel Boulevard, Suite 301,
Warren, NJ 07059
Tel: (908) 462-9719 Fax: (908) 462-9909
rprocanik@core-eng.com

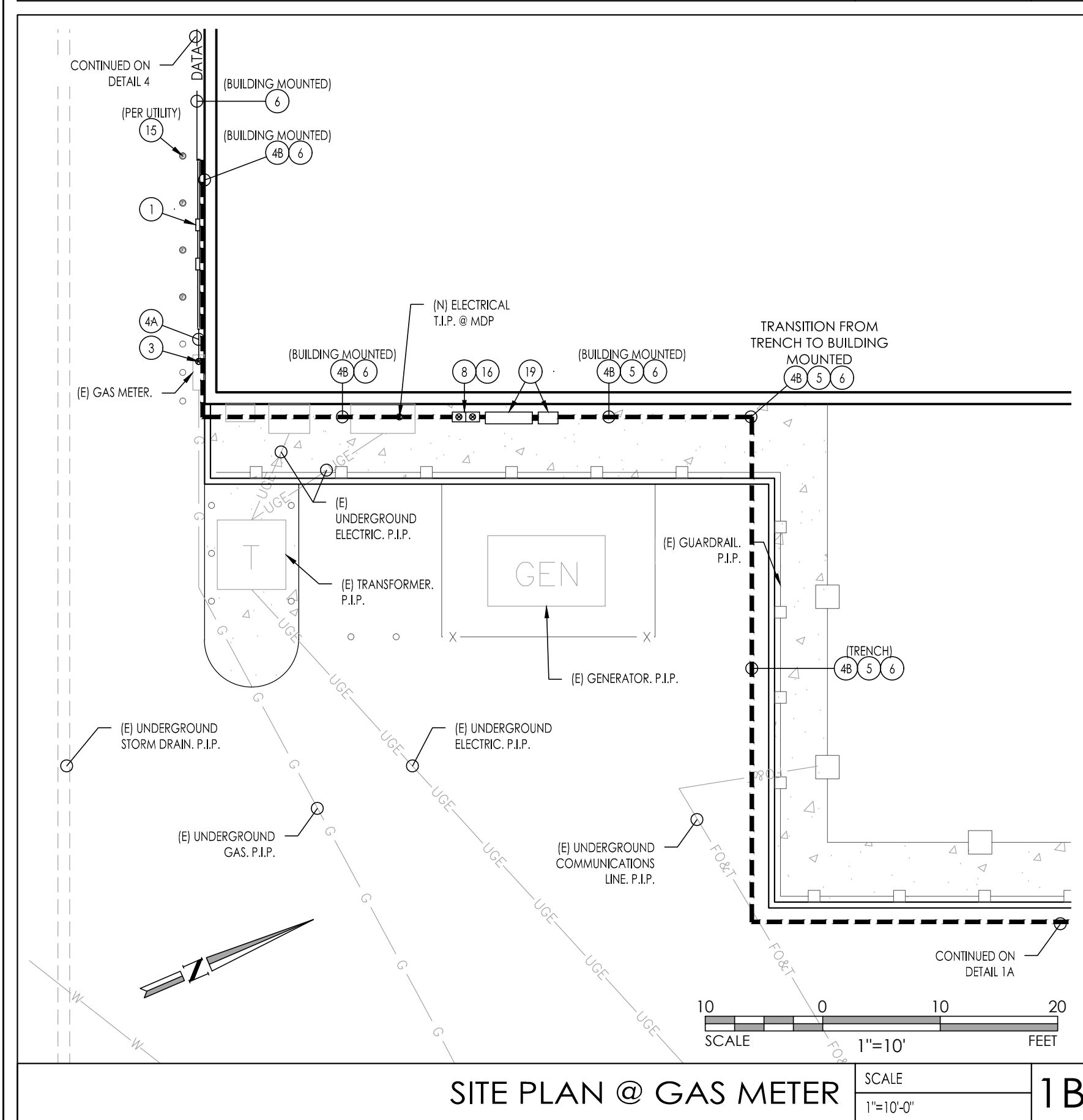
Bloomenergy™

1252 Orleans Drive, Sunnyvale CA, 94089
Tel: 408 543 1500 Fax: 408 543 1501

104 Danbury Road
New Milford, CT 06776

SITE LOCATION MAP
USGS MAP (BRIDGEPORT QUADRANGLE)

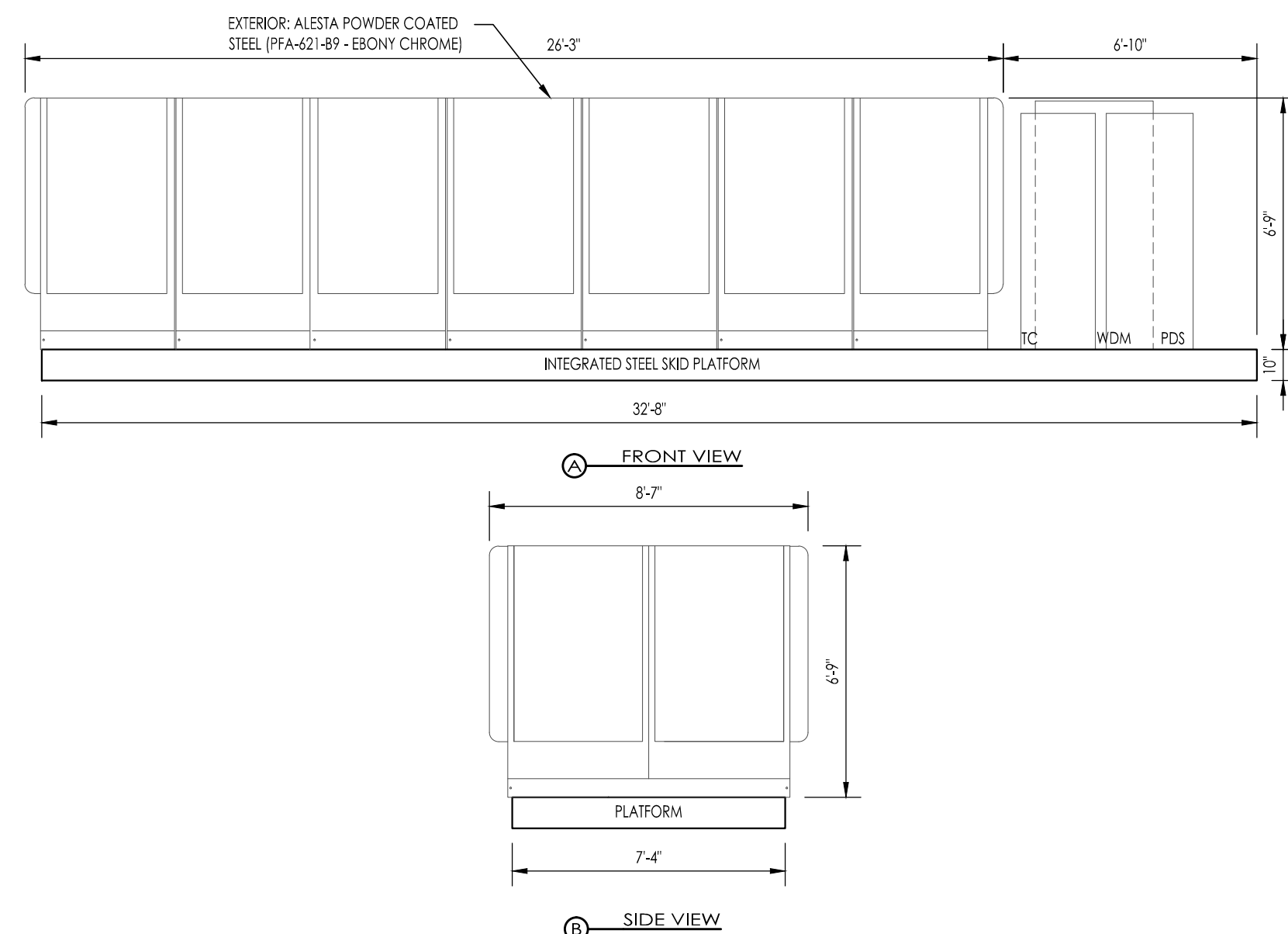
Exhibit 2



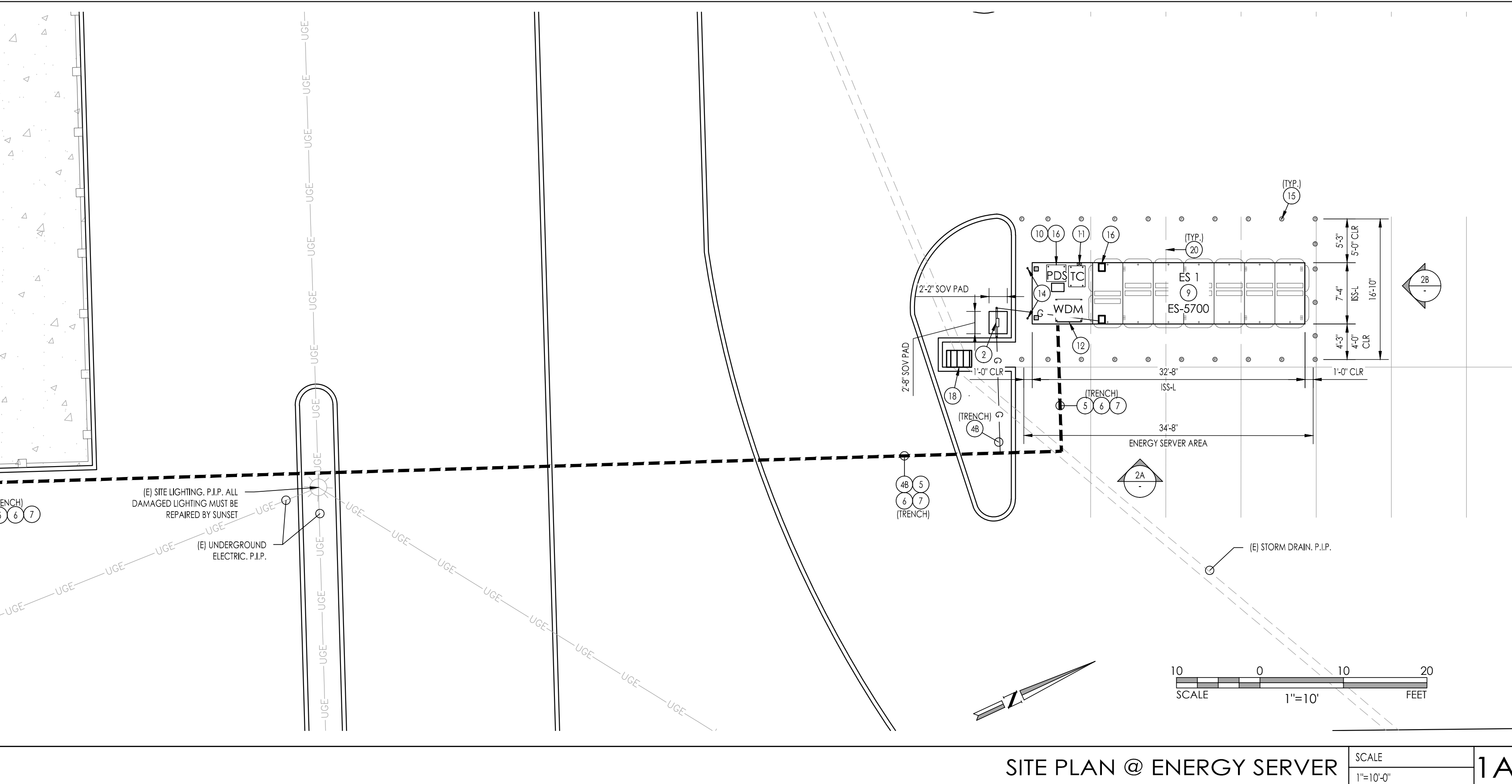
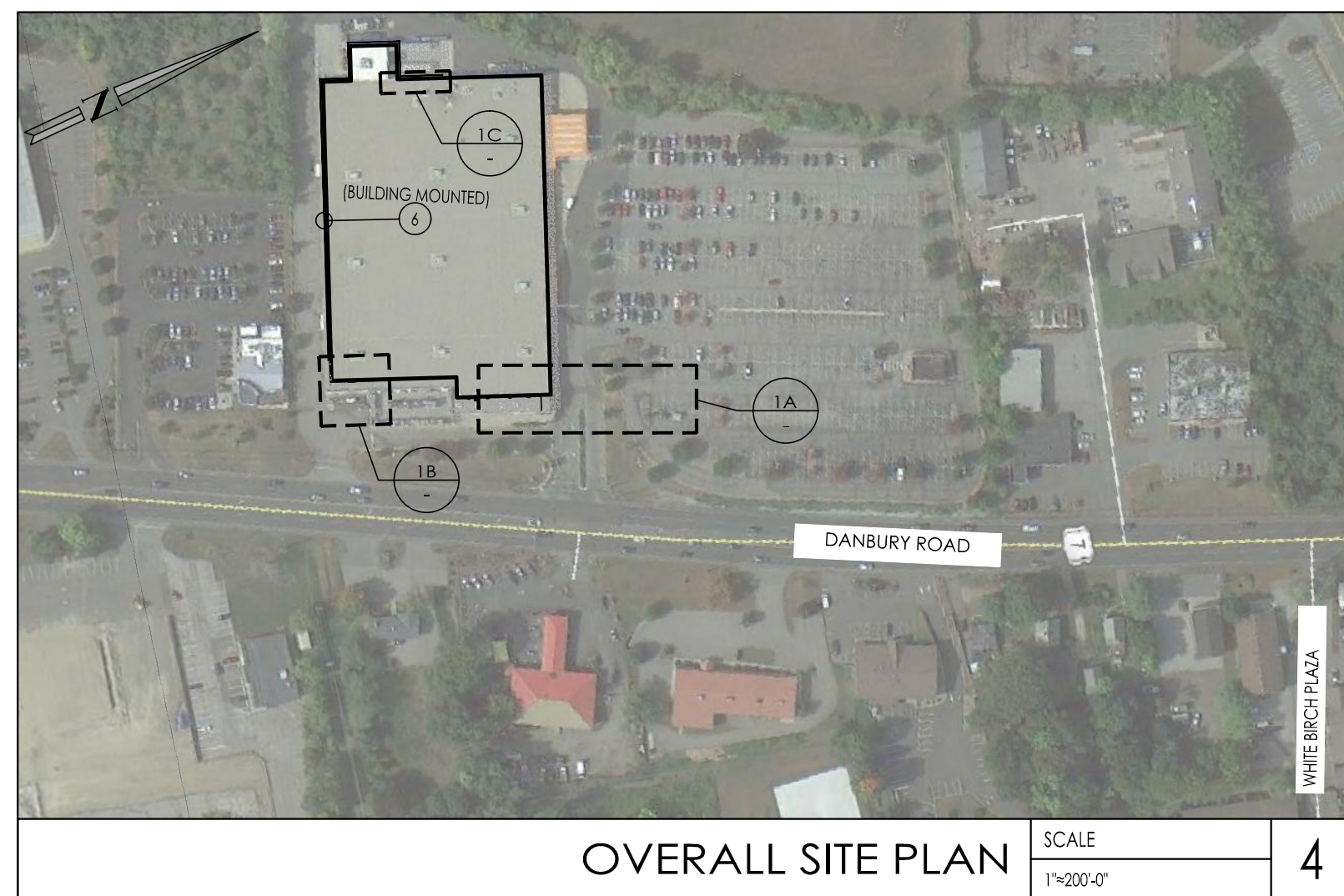
(OVERALL)	
GROSS OUTPUT POWER	210 kW
NET OUTPUT POWER	200 kW
VOLTAGE	480 VAC
MAXIMUM OUTPUT CURRENT	252 AMPs
FREQUENCY	60 Hz
TOTAL SYSTEM WEIGHT	40,564 LBS
WEIGHT - POWER MODULE (6)	5,700 LBS
WEIGHT - INPUT/OUTPUT MODULE (1)	4,850 LBS
WEIGHT - INTEGRATED EQUIPMENT (WMA, POS, & TC)	1,534 LBS
WEIGHT - STEEL SUPPORT FRAME	3,250 LBS
TOTAL SYSTEM AIR EXHAUST	8600 CFM
AIR EXHAUST - POWER MODULE (6)	1200 CFM
AIR EXHAUST - INPUT / OUTPUT MODULE (1)	1200 CFM
ELECTRICAL REQUIREMENTS	
LOW VOLTAGE - DATA TO TC	
CONNECTION	RJ45 FEMALE
CABLE TYPE	1 (E) WIRE
CABLE SIZE	1 CAT5E WITH 20-A (MALE/MALE) ENDS
SPEED	70 Kbps/EACH
CONDUIT SIZE	1" Ø (SHARED WITH CONTROL SIGNAL TO TC & GAS ANALYZER TO TC)
LOW VOLTAGE - CONTROL SIGNAL TO TC	
CONNECTION	
CABLE TYPE	2 (E) WIRE
CABLE SIZE	2 CAT5 (SHIELDED)
SPEED	
CONDUIT SIZE	1" Ø (SHARED WITH DATA TO TC & GAS ANALYZER TO TC)

LOW VOLTAGE - GAS ANALYZER TO T/C	
CONNECTION	R1/4 FEMALE
CABLE TYPE	1 WIRE
CABLE SIZE	CAT# WITH 1/4 IN. (MALE/MALE) FMS
SPEED	
CONDUIT SIZE	1"Ø (SHARED WITH DATA TO T/C AND CONTROL SIGNAL TO T/C)
LOW VOLTAGE - HEAT TREAT TO PMS	
CONNECTION	120 VAC
CABLE TYPE	2 WIRE - GROUND
CABLE SIZE - POWER	#12/2 AWG
CABLE SIZE - GROUND	#12/0 AWG
CONDUIT SIZE	1"Ø
HIGH VOLTAGE - POWER TO PMS	
CONNECTION - POWER	3 PHASE, 480 VAC
CABLE TYPE	3 WIRE - GROUND
CABLE SIZE - POWER	400 MCM (Cu)
CABLE SIZE - GROUND	#1/0 (Cu)
CONDUIT SIZE	3"Ø
WATER REQUIREMENTS	
WATER TYPE	MUNICIPAL GRADE
MINIMUM PRESSURE	35 psi
MAXIMUM PRESSURE	150 psi
FLOW - STARTUP	<0.8 gpm/min
FLOW - CONTINUOUS	0.8 gpm/min
FLOW - SHUTDOWN	0.0 gpm/min
CONNECTION	1/2" MNPT
PIPE SIZE - SUPPLY	SIZE SEE DEPENDENT, USE STAINLESS STEEL OR PVC
PIPE SIZE - RISER	3/4"
VALVE - ISOLATION	3/4" x 1/2" MANWAY STEEL BALL VALVE
PIPE SIZE - EXTENSION	1/2" NPT
QUICK DISCONNECT COUPLER ØØØ	864023005

NATURAL GAS REQUIREMENTS	
FUEL TYPE	NATURAL GAS
PRESSURE	15 (+/-1) psig
AVERAGE CONSUMPTION RATE (60°F, 1 atm)	1.32 MMBtu/hr
MAXIMUM CONSUMPTION RATE (60°F, 1 atm)	2.00 MMBtu/hr
CONNECTION	1" FNPT
PIPE SIZE - SUPPLY	SITE SIZE DEPENDENT
PIPE SIZE - RISER	1" Ø
VALVE - ISOLATION	1" Ø CGA BALL VALVE
PIPE SIZE - EXTENSION	1" Ø NPT
QUICK DISCONNECT COUPLER (QDC)	BEW030033



BLOOMENERGY SPECIFICATIONS	SCALE	3
	NTS	



RESPONSIBILITY NOTES

1. THE FOLLOWING EQUIPMENT SHOWN ON THESE PLANS WILL BE PROVIDED AND DELIVERED BY BLOOM ENERGY. APPLICABLE TRADES TO MOUNT AND MAKE FINAL CONNECTIONS:
 - POWER DISTRIBUTION SECTION (PDS)
 - WATER DISINFECTION MODULE (WDM)
 - DELIVERY CABINET (TC)
 - SIGNAGE (SEE SAFETY SIGNAGE)
 - SITE KIT (SEE SITE KIT NOTES)
2. THE FOLLOWING EQUIPMENT SHOWN ON THESE PLANS WILL BE PROVIDED, DELIVERED AND MOUNTED BY BLOOM ENERGY. APPLICABLE TRADES TO MAKE FINAL CONNECTIONS:
 - CLEAN ENERGY SERVER
 - INTEGRATED STEEL SKID (ISS)
3. CONTRACTOR TO REFER TO ELECTRICAL PLANS FOR ASSOCIATED WORK.

SITE KIT NOTES

1. BLOOMENERGY TO PROVIDE AND DELIVER THE SITE KIT.
2. ELECTRICAL AND PLUMBING CONTRACTOR TO INSTALL SITE KITS, CONSISTING OF PAD PLUMBING AND BUS BARS, ON THE PRECAST CONCRETE PAD PER MANUFACTURER SPECIFICATIONS.
3. PWM DEFLECTORS ARE NOT REQUIRED ON THIS SITE.

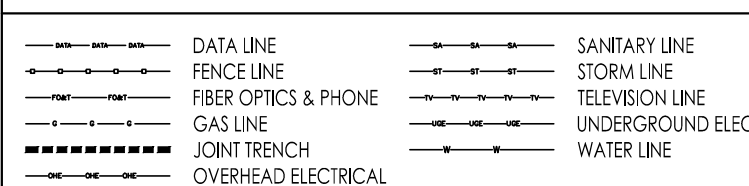
UTILITIES

GAS: YANKEE GAS COMPANY (YGC)
ELECTRIC: CONNECTICUT LIGHT & POWER (CL&P)

CONDUIT & PIPE LENGTHS

TYPE	TOTAL DISTANCE FROM TIE-IN TO ES UNIT (LINEAR)
GAS PIPE	±490'
ELECTRICAL CONDUIT	±450'
DATA CONDUIT (FIBER OPTIC)	±1090'
WATER PIPE	±180'

LEGEND OF UTILITY LINES

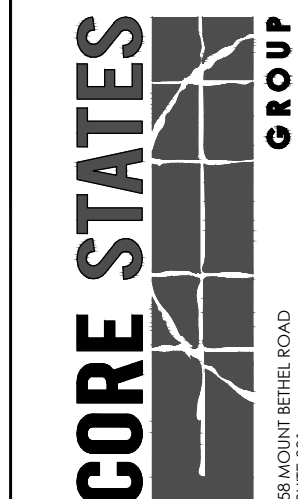


KEYNOTES

- ① (N) UTILITY GAS METER SET INSTALLATION [MSA] FOR CLEAN ENERGY SERVICE. COORDINATE LOCATION & INSTALLATION REQUIREMENTS WITH UTILITY COMPANY. PRIOR TO INSTALLATION, MAINTAIN MINIMUM 3" CLEARANCE FROM ALL EXISTING SOURCES, GAS & INTERCONNECTION FOR NATURAL GAS DIAGRAM [DETAIL 15.0] AND USE LINE DIAGRAM DATA [SHEET 3.0]. ADD IMPACT PROTECTION AS INDICATED BY UTILITY COMPANY.
- ② (N) PRIVATE GAS SHUT-OFF VALVE [SVO] FOR CLEAN ENERGY SERVICE. MAINTAIN MINIMUM 3" CLEARANCE FROM ALL EXISTING SOURCES. CONTRACTOR TO PROVIDE SHUT-OFF VALVE FOR GAS SUPPLY TO TERMINATE AT [DETAIL 4.5] (S). CONTRACTOR TO PROVIDE RISER & INTERCONNECTION FOR NATURAL GAS SUPPLY DIAGRAM [DETAIL 15.0]. SEE DETAIL 3.0/5 FOR ROV RISER.
- ③ (N) GAS SERVICE BRICATION BY UTILITY COMPANY. EXACT LOCATION TO BE COORDINATED WITH UTILITY. REQUIREMENTS FOR UTILITY COMPANY.
- ④A (N) GAS PIPE FROM (N) GAS TAP TO TERMINATE AT (N) UTILITY WAS INSTALLED BY UTILITY COMPANY. SEE S. TRENCHING REQUIREMENTS FOR UTILITY COMPANY.
- ⑤ (N) GAS PIPE, DATA CONDUIT & CABLE (WHERE NEEDED) PER ONE LINE DIAGRAM DATA [SHEET 3.0]. CONTRACTOR TO PROVIDE AT [DETAIL 4.5] (S). CONTRACTOR TO INSTALL BY CONTRACTOR. DETAILS (S) GRADING PLAN [SHEET 3.0] & INTERCONNECTION DIAGRAM [SHEET 5.0] & ELECTRICAL DATA DETAILS [SHEET 6.2]
- ⑥ (N) ELECTRICAL CONDUIT & WRES FROM (N) PDS TO (N) DISCONNECT WITH FINAL TERMINATION AT (E) SWITCHBOARD. DETAILS (S) GRADING PLAN [SHEET 3.0]. SEE S. ONE LINE DIAGRAM [SHEET 3.0].
- ⑦ (N) DATA CONDUIT & CABLE FROM (N) TO TERMINATE AT (E) MPOE. DETAILS (S) GRADING PLAN [SHEET 3.0]. SEE S. ONE LINE DIAGRAM [SHEET 3.0]. DETAILS (E) 2.
- ⑧ (N) WATER PIPE FROM BUILDING DOMESTIC WATER SYSTEM TO (N) WDM. CONNECT TO NEAREST AVAILABLE LOCATION. DETAILS (S) GRADING PLAN [SHEET 3.0]. SEE S. ONE LINE DIAGRAM [SHEET 3.0]. DETAILS (S) GRADING PLAN [SHEET 5.0].
- ⑨ (N) DISCONNECT SWITCH & NEMA 3R ENCLOSURE. DISCONNECT SPECIFICATIONS PER ONE LINE DIAGRAM, NUMBER 6.1.1. MOUNT TO BUILDING WALL & PER VARIOUS PERMITS SPECIFICATIONS. SERVICE LOCATION MARKS ALL REQUIRED N.E.C. CLEARANCES. PROVIDE MODEL NUMBER ON THE OUTSIDE OF THE FRONT PANEL. SPECIFIC COMPLETION PER ELECTRICAL SPECIFICATIONS (SHEET 8.0). SECTION 16A.24. RELOCATE (E) LOOSE WIRE ON BUILDING EXTERIOR AND "NO PARKING" SIGN AS NECESSARY.
- ⑩ (N) BLOOMBERY PER 57-5200 ENERGY SERVICE. RS. STEEL STUDS AND MOUNTING SPECIFICATIONS PER STEEL STUD. SEE S. ITS PLACEMENT PER GRADING PLAN [SHEET 3.0]. PIPE & CONDUIT SUB-UP LOCATIONS PER PIPE PLAN & DETAILS [SHEET 4.0] AND ELECTRICAL CONDUIT DETAILS [SHEET 6.3].
- ⑪ (N) POWER DISTRIBUTION SECTION (PDS). SEE MOUNTING SPECIFICATIONS PER GRADING PLAN [SHEET 3.0]. CONDUIT SUB-UP LOCATIONS PER ELECTRICAL CONDUIT DETAILS [SHEET 6.3].
- ⑫ (N) TELEMETRY CABINET [TC] WITH SWITCH (W) MOUNTING CLEAN ENERGY SERVICE. ESTIMATE POWER-CONSUMPTION [WPO]. SEE MOUNTING SPECIFICATIONS PER GRADING PLAN [SHEET 3.0]. CONDUIT SUB-UP LOCATIONS PER ELECTRICAL CONDUIT DETAILS [SHEET 6.3].
- ⑬ (N) WATER DRAINAGE DRAINAGE WDM. SEE MOUNTING SPECIFICATIONS PER GRADING PLAN [SHEET 3.0]. PIPE & CONDUIT SUB-UP LOCATIONS PER PIPE PLAN & DETAILS [SHEET 4.0] & ELECTRICAL CONDUIT DETAILS [SHEET 6.3].
- ⑭ (N) WATER TAP. PRESSURE EXCEEDS 150 PSI. COORDINATE WITH BLOOMBERY WATERPUMP & INSTALL PRESSURE REGULATOR PRIOR TO WDM.
- ⑮ (N) 10" OF COPPER GROUNDING RODS 6'-6" APART. SPECIFICATIONS PER ONE LINE DIAGRAM [SHEET 6.1].
- ⑯ (N) GUARD POST (TYPE, SIZE AND LOCATION) PER IMPACT PROTECTION FOR CONDUIT. SEE INQUIRY & FLUSH WITH GRADE AND NO ANGLES OR HOOKS FOR CONDUIT AND FOR CONDUIT.
- ⑰ (N) PROVIDE SPECIFIC BOXES OF CONDUIT & WIRE AT ALL ELECTRICAL SUB-UP LOCATIONS.
- ⑱ (N) CORE CONDUIT AND/OR PIPE THROUGH WALL. SCAN WALL PRIOR TO CORING. DETAILS (S) PER SHEET 3.1.
- ⑲ (N) INLET MIP - INSTALL "DANDY" SCALF WITH OVERFLOW POOLS (BY DANDY) CONDUITS) OR APPROVED EQUAL WITH OULFLOW POOLS. INSTALL PRIOR TO CONDUIT AND/OR PIPE THROUGH WALL.
- ⑲ (N) UTILITY APPROVED METER & TC CABINET IN NEMA 3R ENCLOSURES. SPECIFICATIONS PER ONE LINE DIAGRAM [SHEET 6.1]. MOUNT TO BUILDING WALL PER MANUFACTURER SPECIFICATIONS. SERVICE LOCATION MARKS ALL REQUIRED N.E.C. CLEARANCES. PROVIDE MODEL NUMBER ON THE OUTSIDE OF THE FRONT PANEL. SPECIFIC COMPLETION PER ELECTRICAL SPECIFICATIONS (SHEET 8.0). SECTION 16A.24.
- ⑳ (E) STRIPPING TO BE REMOVED. (TOTAL 4 CIPSACES)

78

THE HOME DEPOT #48
HOM4200
NEW CONSTRUCTION OF
CLEAN ENERGY SERVER
104 DANBURY ROAD
NEW MILFORD, CT 06776



DOCUMENTS PREPARED BY CORE STATES GROUP, INCLUDING THIS DOCUMENT, ARE TO BE USED ONLY FOR THE SPECIFIC PROJECT AND SPECIFIC USE FOR WHICH THEY WERE INTENDED. ANY EXTENSION OF USE TO ANY OTHER PROJECT, WITHOUT OR BY ANY OTHER PARTY, WITHOUT THE EXPRESSED WRITTEN CONSENT OF CORE STATES GROUP IS DONE UNLAWFULLY AND AT THE USER'S OWN RISK. IF USED IN A WAY OTHER THAN THAT SPECIFICALLY INTENDED, USER WILL HOLD CORE STATES GROUP HARMLESS FROM ALL CLAIMS AND

REV	DATE	DESCRIPTION
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[illegible]

PROJECT INFORMATION		

JOB #	BEC-
DATE:	01/
DRAWN BY:	
CHECKED BY:	

MODEL

(1) ES-5700

(1) ES-5700

SHEET TITLE

SITE PLAN

STREET 27 (IN)

SHEET NUMBER

202.0

NOT FOR CONSTRUCTION

Exhibit 3



STATE OF CONNECTICUT

DEPARTMENT OF ENERGY AND ENVIRONMENTAL PROTECTION
PUBLIC UTILITIES REGULATORY AUTHORITY
TEN FRANKLIN SQUARE
NEW BRITAIN, CT 06051

**DOCKET NO. 12-02-09 PETITION OF BLOOM ENERGY CORPORATION FOR A
DECLARATORY RULING THAT ITS SOLID OXIDE FUEL
CELL ENERGY SERVER WILL QUALIFY AS A CLASS I
RENEWABLE ENERGY SOURCE**

September 12, 2012

By the following Directors:

Arthur H. House
John W. Betkoski, III

DECISION

I. INTRODUCTION

By Petition dated February 14, 2012, pursuant to Section 4-176 in the General Statutes of Connecticut (Conn. Gen. Stat.) and Section 16-1-113 in the Regulations of Connecticut State Agencies, Bloom Energy Corporation requests that the Public Utilities Regulatory Authority (Authority) issue a declaratory ruling that its solid oxide fuel cell energy server qualifies as a Class I renewable energy source.

II. PETITIONER'S EVIDENCE

Bloom Energy Corporation (Bloom) has commercialized a scalable, modular fuel cell using Bloom's patented solid oxide fuel cell (SOFC) technology. A fuel cell is a device that uses a fuel and oxygen to create electricity by an electrochemical process. A single fuel cell consists of an electrolyte and two catalyst-coated electrodes (an anode cathode). Fuel cells are generally categorized by the type of electrolyte used. Petition, pp. 2 and 3.

Each Bloom Energy Server consists of thousands of Bloom's patented SOFCs. Each fuel cell is a flat, solid ceramic square capable of producing at least 25 watts. In an energy server, Bloom "sandwiches" the SOFCs between metal interconnect plates into a fuel cell "stack." Bloom aggregates multiple fuel cell stacks together into a "power module," and then multiple power modules, along with a common fuel input and electrical output, are assembled as a complete energy server fuel cell. Id., p. 3.

The Bloom Energy Server converts the chemical energy contained in fuel, such as natural gas, into electricity at an efficiency of approximately 50% - 60% (lower heating value net AC) without any combustion or multi-stage conversion loss. Fuel entering the energy server is processed using a proprietary catalytic method to yield a reformat gas stream, and the gaseous product and preheated air are introduced into the fuel cell stacks. Within the stacks, ambient oxygen reacts with the fuel to produce direct current (DC) electricity. The DC power produced by the energy server system is converted into 480-volt AC power using an inverter, and delivered to the host facility's electrical distribution system. Id.

SOFCs operate at very high temperatures, obviating the need for expensive metal catalysts. With low cost ceramic materials, and extremely high electrical efficiencies, SOFCs can deliver attractive economies without relying on combined heat and power. Id.

Bloom Energy Servers are a fraction of the size of a traditional base load power source, with each server occupying a space similar to that of a parking space. This small, low-impact, modular form of base load power does not pose the environmental challenges associated with a traditional base load power plant, significantly reducing environmental impacts. Moreover, Bloom's innovative design requires only an initial input of 120 gallons of water per 100 kW, after which no additional water is consumed during normal operation. Id., pp. 3 and 4.

Bloom Energy Servers deliver significant environmental benefits over conventional base load technologies. In addition to significant CO₂ reductions due to its high efficiency, the energy server emits virtually no NO_x, SO_x, or other smog forming particulates since the conversion of gas to electricity in a Bloom Energy Server is done through an electrochemical reaction rather than combustion. Id., p. 4.

III. AUTHORITY ANALYSIS

Conn. Gen. Stat. §16-1(a)(26) defines a Class I renewable energy source as:

(A) energy derived from solar power; wind power; a fuel cell; methane gas from landfills; ocean thermal power; wave or tidal power; low emission advanced renewable energy conversion technologies; a run-of-the-river hydropower facility provided such facility has a generating capacity of not more than five megawatts, does not cause an appreciable change in the river flow, and began operation after the effective date of this section; or a biomass facility, including, but not limited to, a biomass gasification plant that utilizes land clearing debris, tree stumps or other biomass that regenerates or the use of which will not result in a depletion of resources, provided such biomass is cultivated and harvested in a sustainable manner and the average emission rate for such facility is equal to or less than .075 pounds of nitrogen oxides per million BTU of heat input for the previous calendar quarter, except that energy derived from a biomass facility with a capacity of less than five hundred kilowatts that began construction before July 1, 2003, may be considered a Class I renewable energy source, provided such biomass is cultivated and harvested in a sustainable manner; or (B) any electrical generation, including distributed generation, generated from a Class I renewable energy source.

Based on Bloom's assertions, the Authority finds that its Bloom Energy Server qualifies as a Class I renewable energy source "fuel cell" as defined in Conn. Gen. Stat. §16-1(a)(26)(A).

The Authority has created an electronic application process for generation owners to apply for a Connecticut Renewable Portfolio Standards registration. The application is available on the Authority's website at the web address <http://www.ct.gov/pura>. The application should be submitted electronically along with a single hard-copy filing. While the Authority concludes in this Decision that the Bloom Energy Server would qualify as a Class I renewable energy source pursuant to Conn. Gen. Stat. §16-1(a)(26), Bloom must still apply for registration of the aforementioned system once the facility becomes operational and is registered in the New England Generation Information System.

IV. CONCLUSION

Based upon the project as described herein, the Authority finds that, as proposed, the Bloom Energy Server would qualify as a Class I renewable energy source. However, since the energy server is not yet operational, it should apply for Class I registration once it begins operations.

The Connecticut Department of Energy and Environmental Protection is an Affirmative Action/Equal Opportunity Employer that is committed to requirements of the Americans with Disabilities Act. Any person with a disability who may need information in an alternative format may contact the agency's ADA Coordinator at 860-424-3194, or at deep.hrmed@ct.gov. Any person with limited proficiency in English, who may need information in another language, may contact the agency's Title VI Coordinator at 860-424-3035, or at deep.aaoffice@ct.gov. Any person with a hearing impairment may call the State of Connecticut relay number – 711. Discrimination complaints may be filed with DEEP's Title VI Coordinator. Requests for accommodations must be made at least two weeks prior to any agency hearing, program or event.

**DOCKET NO. 12-02-09 PETITION OF BLOOM ENERGY CORPORATION FOR A
DECLARATORY RULING THAT ITS SOLID OXIDE FUEL
CELL ENERGY SERVER WILL QUALIFY AS A CLASS I
RENEWABLE ENERGY SOURCE**

This Decision is adopted by the following Directors:

Arthur H. House

John W. Betkoski, III

CERTIFICATE OF SERVICE

The foregoing is a true and correct copy of the Decision issued by the Public Utilities Regulatory Authority, State of Connecticut, and was forwarded by Certified Mail to all parties of record in this proceeding on the date indicated.



Kimberley J. Santopietro
Executive Secretary
Department of Energy and Environmental Protection
Public Utilities Regulatory Authority

September 12, 2012

Date

Exhibit 4

February 5, 2015

Via electronic mail

Town Hall - Lower Level
10 Main Street
New Milford, CT 06776

Attn: Laura Regan

RE: Bloom Energy Clean Energy Server Installation
The Home Depot - 104 Danbury Road

Ms. Regan,

On behalf of Bloom Energy we would like to provide you with information pertaining to the proposed clean energy server installation project located at The Home Depot, 104 Danbury Road.

This project proposes to install one (1) new Bloom Energy Server, ES-5700; a new class of distributed power generator which produces clean, reliable and affordable electricity at the customer site. Bloom Energy Server contains solid oxide fuel cells which provide 200 kW of power, utilizing a non-combustive chemical process. The Clean Energy Server are mounted onto a 32'8" x 7'4" steel skid. Placement of the Clean Energy Server equipment is being proposed to be installed in the parking area north of the building.

The ES-5700 equipment has been designed in compliance with Underwriters Laboratories (UL) in addition to various safety standards and requirements. There are no harmful off-gases or byproducts that will be produced by this equipment.

Please note that the energy server is monitored 24 hours a day, 7 days a week by Bloom Energy's communications network in Sunnyvale, CA. In the unlikely event the system will require attention, the system can be remotely shut off by Bloom. Additionally, the equipment will have several means to shut down the energy server locally.

We are submitting to the Connecticut Siting Council within the next two weeks and wanted to give you an opportunity to see the plans in advance. We would be happy to discuss any comments you may have either by phone or in person. If you have any questions or need further information, please feel free to call.

Thank you,
Core States Group



Rich Procanik
Project Manager

Exhibit 5

Clean Base Load Power

Bloom Energy Corporation is a provider of breakthrough solid oxide fuel cell (SOFC) technology that delivers clean power to meet base load electricity needs. Bloom Energy Servers™ are among the most efficient energy generators available, providing for significantly reduced electricity costs and dramatically lower greenhouse gas emissions. Bloom Energy Servers™ produce reliable and clean electricity using an environmentally superior non-combustion process. The result is a new option for energy infrastructure that combines increased electrical reliability and improved energy security with significantly lower environmental impact.

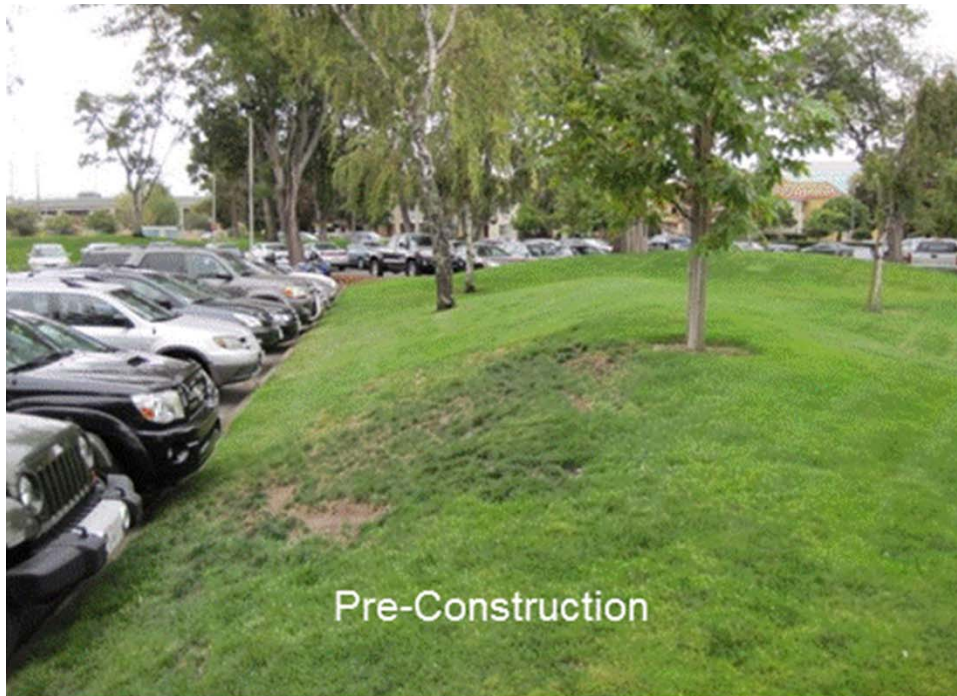
All-Electric Solution

The Bloom Energy Server™ is an “all-electric” solution that utilizes waste heat internally to increase the efficiency of electrical power production. This characteristic allows Bloom systems to be deployed at sites where it is not necessary to match on-site thermal loads or develop complicated infrastructure to handle thermal energy outputs. The Energy Server’s superior electrical efficiency obviates the need for complicated CHP systems and expands the opportunity to deploy clean on-site power generation.

Technical Highlights	
<i>Inputs</i>	
Fuel	Natural Gas
Fuel pressure	15 psig
Fuel required per 100 kW generated	0.661 MMBtu/hr of natural gas
<i>Outputs</i>	
Nominal power output (net AC)	Per 100 kW generated
Electrical efficiency (LHV net AC)	50 - 60%
Electrical connection	480V @ 60 Hz
<i>Emissions</i>	
NOx	< 0.01 lbs/MW-hr
SOx	negligible
CO	< 0.10 lbs/MW-hr
VOCs	< 0.02 lbs/MW-hr
CO2 @ specified efficiency	773 lbs/MW-hr of natural gas
<i>Codes & Standards</i>	
Designed to comply with NEC, NFPA, ANSI, CT DPUC and CT SIR utility interconnection standards.	
Exempt from Air District Permitting; meets stringent CARB 2007 emissions standards.	

Bloom Energy Server





Pre-Construction



Install Preparations – Trenching & Underground Utility



Set Pads



Site Completion

Bloom Energy Server Installation



Representative Installations



Exhibit 6

State of California
AIR RESOURCES BOARD
Executive Order DG-036
Distributed Generation Certification of
Bloom Energy Corporation
ES-5700

WHEREAS, the Air Resources Board (ARB) was given the authority under California Health and Safety Code section 41514.9 to establish a statewide Distributed Generation (DG) Certification Program to certify electrical generation technologies that are exempt from the permit requirements of air pollution control or air quality management districts;

WHEREAS, this DG Certification does not constitute an air pollution permit or eliminate the responsibility of the end user to comply with all federal, state, and local laws, rules and regulations;

WHEREAS, on July 11, 2011, Bloom Energy Corporation applied for a DG Certification of its 200 kW ES-5700 fuel cell and whose application was deemed complete on August 30, 2011;

WHEREAS, Bloom Energy Corporation has demonstrated, according to test methods specified in title 17, California Code of Regulations (CCR), section 94207, that its natural-gas-fueled ES-5700 fuel cell has complied with the following emission standards:

1. Emissions of oxides of nitrogen no greater than 0.07 pounds per megawatt-hour;
2. Emissions of carbon monoxide no greater than 0.10 pounds per megawatt-hour; and
3. Emissions of volatile organic compounds no greater than 0.02 pounds per megawatt-hour.

WHEREAS, Bloom Energy Corporation has demonstrated that its ES-5700 fuel cell complies with the emission durability requirements in title 17, CCR, section 94203(d);

WHEREAS, I find that the Applicant, Bloom Energy Corporation, has met the requirements specified in article 3, title 17, CCR, and has satisfactorily demonstrated that the ES-5700 fuel cell meets the DG Certification Regulation 2007 Fossil Fuel Emission Standards;

NOW THEREFORE, IT IS HEREBY ORDERED, that a DG Certification, Executive Order DG-036 is granted.

This DG Certification:

- 1) is subject to all conditions and requirements of the ARB's DG Certification Program, article 3, title 17, CCR, including the provisions relating to inspection, denial, suspension, and revocation;
- 2) shall be void if any manufacturer's modification results in an increase in emissions or changes the efficiency or operating conditions of a model, such that the model no longer meets the DG Certification Regulation 2007 Fossil Fuel Emission Standards; and
- 3) shall expire on the 21st day of September, 2016.

Executed at Sacramento, California, this 21st day of September 2011.

James Goldstene
Executive Officer
by

/S/

Richard Corey, Chief
Stationary Source Division

Exhibit 7

March 4, 2015

VIA FIRST CLASS MAIL

RE: Application for Core States Group, as Agent for Home Depot, for the construction of a 200 kW Fuel Cell Customer-Side Distributed Resource at 104 Danbury Road – New Milford, Connecticut.

Dear Ladies and Gentlemen:

Pursuant to Section 16-50j-40 of the Connecticut Siting Council's (the "Council") regulations, we are notifying you that Home Depot intends to file on or shortly after March 4, 2015, a petition for declaratory ruling with the Council. The petition will request the Council's approval of the location and construction of an approximately 200 kilowatt Bloom Energy Corporation fuel cell facility and associated equipment (the "Facility"), located at the site of a Home Depot building at 104 Danbury Road in New Milford, Connecticut (the "Site"). Electricity generated by the Facility will be consumed primarily at the Site, and any excess electricity will be exported to the electric grid. The Facility will be fueled by natural gas.

The facility will be located in front of the Home Depot store, in the asphalt parking area, near the easterly corner of the building. The fuel cell is approximately 32'-8" long, 8'-7" wide, and 6'-9" high.

If you have any questions regarding the proposed Facility, please contact the undersigned or the Council.

Respectfully,



Richard N. Procanik
rprocanik@core-eng.com
(908) 462-9919

Municipal Official/Agency	Name/Address
New Milford Mayor	Patricia A. Murphy New Milford Town Hall 10 Main Street New Milford, CT 06776
New Milford Planning Department	Joseph Girardot, Chairman Planning Department 10 Main Street, Lower Level New Milford, CT 06776
New Milford Zoning Commision	Laura Regan, Zoning Enforcement Officer Zoning Department 10 Main Street, Lower Level New Milford, CT 06776
New Milford Inland Wetlands Agency	James Ferlow, Wetlands Enforcment Office Inland Wetlands Agency 10 Main Street, Lower Level New Milford, CT 06776
New Milford State Senator	Clark Chapin Senate District 30 105 Cappin Road New Milford, CT 06776
New Milford State Representative	Cecilia Buck-Taylor House District 67 105 Cappin Road New Milford, CT 06776
New Milford State Representative	Richard Smith House District 108 105 Cappin Road New Fairfield, CT 06776

Connecticut Attorney General	George Jesen Attorney General 55 Elm Street Hartford, CT 06106
State Development of Energy and Environmental Protection	Rob Klee Commissioner 79 Elm Street Hartford, CT 06106
State Department of Public Utility Regulatory Authority	Arthur House Chairman 10 Franklin Square New Britain, CT 061051
State Department of Public Health	Dr. Jewel Mullen Commissioner 410 Capital Avenue Hartford, CT 06134
State Council on Environmental Quality	Susan D. Merrow Chair 79 Elm Street Hartford, CT 06106
State Department of Agriculture	Steven K. Reviczky Commissioner 165 Capital Avenue Hartford, CT 06106
Office of Policy & Management	Benjamin Barnes Secretary of OPM 450 Capital Avenue Hartford, CT 06106

State Department of Economic & Community Development	Catherine Smith Commissioner 505 Hudson Street Hartford, CT 06106
State Department of Transportation	James P. Redeker Commissioner 2800 Berlin Turnpike Newington, CT 06111
Abutter Property	Abutter Name/Mailing Address
3102 Route 9	108 Danbury Road LLC & Unicorn Contracting Corp Cold Spring, NY 10516
358 Saw Mill River Road	Rhinbeck Realty LLC & Mavis Tire Supply Millwood, NY 10546
94 Danbury Road	Bruzzi Real Estate LLC New Milford, CT 06776
10 Main Street	New Milford Town of New Milford, CT 06776